CHAPTER TWO: THE PLANNING CONTEXT

A. BENEFITS OF WALKING & BICYCLING

INTRODUCTION

While Metro Nashville has made some significant leaps forward in the last several years, providing pedestrian and bicycle facilities has not historically been a high priority. While 752 miles of sidewalks are currently in place on Nashville streets, this is just half the mileage of many comparable cities (see Chapter Four, Section C: Peer City Review for more information). Most of Nashville's sidewalks are on streets in the oldest parts of the city – areas developed prior to the adoption of suburban-style land development patterns that occurred after World War II. Until 2000, there were practically no bike lanes on Nashville's streets.

> *"I look forward to seeing how this strategic planning process helps me in my efforts to have less reliance on my personal vehicle."*

Historically, Nashville's transportation planning efforts focused primarily on facilities for private motor vehicles. Perhaps as a result of this strategy, the Federal Highway Administration (FHWA) reported that, in 1999, Nashvillians had the highest rate of motor vehicle travel in the United States - an average of 37.7 miles per person per day.[1] While population in the Nashville area grew 26% between 1982 and 1997, it was outpaced by vehicle miles traveled, which increased by 115%.[2] During the same period, developed land in the region increased by 87%.[3] Per person, Nashvillians are utilizing more land and dedicating more time to travel than at any point in our history. Also increasing are air quality problems, concerns about the impacts of traffic on quality of life, and frustration from drivers, pedestrians and cyclists alike.

In recent years, however, Nashville's approach to transportation planning has begun to shift. Metro is at the beginning of a process that will involve the adoption of a multi-modal approach to transportation planning. In 2000 and 2001 alone, $35 million in local funds have been dedicated to retrofitting public streets with new sidewalks and repairing inadequate sidewalks. New bike lanes and more greenways are also being developed. In addition, various ordinances have been upgraded to ensure greater participation by private developers in providing sidewalks and bikeways. Significant additional work remains to be done, and this plan is intended to guide that work. However, the benefits of changes that have already occurred are now becoming visible in the Nashville community.

These funding and policy changes reflect a growing recognition, on the part of Metro officials and the public at large, of the variety of benefits offered by increased walking and bicycling. Public input received during the development of this plan reflects intense support and demand for pedestrian and bicycle-friendly streets. Benefits include more transportation choices, reduced

Historically, Nashville's transportation approach has focused on motor vehicle facilities rather than multimodal transportation.

[1] Office of Highway Policy Information, Highway Statistics 1999, Federal Highway Administration, www.fhwa.dot.gov/ohim/hs99
[2] Texas Transportation Institute, *1999 Urban Mobility Study*, http://mobility.tamu.edu
[3] Southern Environmental Law Center, *Where are We Growing? Land Use & Transportation in Middle Tennessee*, 2001.

healthcare costs, air quality improvements, better mobility, safer streets and a higher quality of community life.

MORE WAYS TO GET THERE

Cars and transit are important elements of Nashville's transportation system. Rail will also play a role in the future. These modes are regional in scope and are well-suited to long and middle-distance trips. In contrast, walking and bicycling are local and neighborhood-oriented in scope, and are well-suited to shorter distance trips. A balanced transportation system provides for all modes, allowing travelers to choose the most convenient mode for a given trip. For many travelers, walking or bicycling is the preferred mode for a variety of trips. Indeed, a 1995 Rodale Press study found that 40% of Americans would commute by bicycle if safe facilities were available.[4] A key goal of the *Strategic Plan for Sidewalks & Bikeways* is to provide a more balanced transportation system so that Nashvillians have more viable choices for travel.

> *"I don't have a car so that makes my need of sidewalks even greater."*

The FHWA's 1995 *National Personal Transportation Survey* determined that 40% of all trips are less than two miles in distance. An average cyclist can cover two miles in ten or fifteen minutes. Most pedestrians can cover the same distance in about 30 minutes.[4] In Nashville, the vast majority of these short trips are now made by car. If even half of these trips were shifted to walking or bicycling, traffic congestion would be reduced significantly. In addition, walking and bicycling require less space per traveler than automobiles. Thus, infrastructure that supports walking and bicycling can usually be provided with less of an impact and at a lower cost than other transportation facilities.

Roadway improvements for pedestrians and bicyclists can also enhance safety for motorists. For example, adding sidewalks to a street effectively separates pedestrians and vehicles.

A multi-modal transportation approach can include several benefits including cleaner air and increased mobility.

Also, adding bike lanes means that motor vehicles do not have to weave into an adjacent lane to pass a cyclist.

INCREASED MOBILITY & TRANSPORTATION EQUITY FOR ALL NASHVILLIANS

For many travelers, driving is not an option. In fact, one-third of the people in the United States do not drive.[4] In Davidson County, almost 10% of households do not own a car at all. This number increases significantly in more urbanized areas.[5] Young people, senior adults, and those who choose not to, or cannot afford to, own a car have limited options for transportation in Nashville.

All of these individuals have the same mobility needs as motorists. Walking and bicycling are affordable means of mobility, and available to nearly everyone. Of course, nearly all motorists are also pedestrians and many are cyclists. Most would like to be able to choose what form of transportation they use for a given trip. By facilitating travel by foot or bicycle, travelers of all modes benefit.

[4] www.bicyclinginfo.org/pp/benefits/tranben/index.htm
[5] Housing Characteristics for Davidson County, Tennessee, U.S. Census Bureau, 1990. http://factfinder.censun.gov/servlet

FEWER DEATHS AND INJURIES

Roadway plans should integrate well designed pedestrian and bicycle facilities so that safety is increased for all roadway users. Good pedestrian and bicycle designs would also encourage potential pedestrians and bicyclists to use the public right-of-way. Wide sidewalks that are buffered from moving vehicles and intersections that provide clear guidance to bicyclists on where to position themselves can decrease the likelihood of crashes, while increasing the percentage of pedestrian and bicycle travelers. In 1994, the U.S. Department of Transportation established a goal of doubling the number of pedestrian and bicycle trips while reducing injuries and fatalities by 10%.[6] The means for achieving this goal have largely been focused on engineering, providing more and better quality walking and bicycling facilities. Between 1990 and 2001, annual federal spending on such facilities increased from $6 million to $339 million.[7]

"It would be a draw to people moving to Nashville to see the community connected with bike lanes and sidewalks. It takes people out of their cars, away from isolation and back into the community."

The introduction of design features, such as well-marked, short crosswalks, reduce the amount of time that pedestrians are in potential conflict with motor vehicles at an intersection. Also, for crashes, there is a direct relationship between vehicular speed and the severity of pedestrian injuries. The probability of a pedestrian dying from a crash with a motor vehicle is 3.5% at 15 mph, 37% at 31 mph and 83% at 44 mph.[8] Therefore, reducing speeds on streets can have a direct safety benefit for pedestrians.

Likewise, studies have concluded that bicycle lanes significantly increase cyclists' obedience to stop signs and reduce wrong-way bicycle riding, which are two operations that account for a significant percentage of bicycle/car crashes. Furthermore, motorists are more likely to see, and less likely to cut off, cyclists when a bike lane is present.[9]

Reducing injuries and fatalities for walkers, bicyclists and motorists alike involves education, law enforcement, and engineering. Although each of these elements must work in conjunction with the others, it is engineering that determines the physical environment that all roadway users share. It is difficult for education and enforcement to compensate for a poorly designed roadway.

LOWER PERSONAL TRANSPORTATION COSTS

No other forms of transportation are more economical than bicycling or walking. The League of American Bicyclists has determined that the cost of operating a bicycle for one year is $120.[10] Walking, of course, costs virtually nothing. Providing a good bike and pedestrian infrastructure can free some people from the expense of car ownership, or the need for a second or third car.

ECONOMIC DEVELOPMENT

By making neighborhoods safer and more livable, good pedestrian and bicycle facilities can also raise property values and marketability. A 1998 report by the Real Estate Research Corporation determined that, over the next 25 years, real estate values will rise the fastest in communities that incorporate mixed-use districts and "pedestrian-friendly configurations".[11] Knowing this, forward-thinking land developers not only

[6] Federal Highway Administration, *The National Walking & Bicycling Study: Final Report*, U.S. Department of Transportation, 1994, FHWA-PD-94-023.
[7] http://www.bicyclinginfo.org/insight/fact_sheets/index.htm
[8] Rudolph Limpert, *Motor Vehicle Accident Reconstruction and Cause Analysis*, Fourth Edition, Michie Company, Charlottesville, 1994.
[9] Federal Highway Administration, *A Comparative Analysis of Bicycle Lanes Versus Wide Curb Lanes*, December 1999.
[10] http://bicyclinginfo.org/pp/benefits/econoben/index.htm
[11] ERE Yarmouth and Real Estate Research Corporation, *Defining New Limits, Emerging Trends in Real Estate*, 1998. www.rerc.com

Encouraging physical activity like bicycling and walking supports a healthier lifestyle.

build trails and design their streets for pedestrians and bicyclists, they also plan compact neighborhoods, with schools, shopping centers, and parks within walking and riding distance of home.

Businesses want to be in a city that will help them attract quality employees. Motivated by concerns about gridlock, lack of transportation choices, and a poor quality of life, which can make recruiting and retaining skilled workers difficult, major firms around the country are advocating pedestrian-friendly development patterns.[12]

"Thank you for taking on such an important initiative. The plan will be important to the health and safety of Nashvillians and important for the environment."

Several of the cities that consistently appear in the "best places" lists that people and businesses use to help decide where to locate also happen to have extensive pedestrian and bicycle networks. Frequently listed bike and pedestrian-friendly cities include Austin, Texas; Portland, Oregon; and Madison, Wisconsin.

CLEANER AIR

The Metro Health Department has determined that motor vehicles are responsible for 87% of the carbon monoxide and 83% of the nitrogen oxide emissions in Davidson County.[13] Nitrogen oxide creates ground level ozone, which is a primary contributor to respiratory illnesses. These diseases include asthma, chronic bronchitis, and other health problems to which children and senior adults are especially vulnerable. Due to the number of high ozone days, the American Lung Association gave Davidson County an "F" grade in air quality in 2001.[14]

In contrast, neither bicycling nor walking produces air pollutants. Because these modes are best suited to short distance trips, they can have an even more significant impact on air quality. On an average trip, 60% of the pollution created by an automobile is produced during the first few minutes of operation, before the vehicle's pollution control devices can work effectively.[15] These short trips, the least efficient for driving, are the most efficient for walking or bicycling. In fact, a four-mile trip by bicycle instead of by car keeps about 15 pounds of pollutants out of the air.[16]

SMARTER GROWTH

Generally, the cities in the U.S. with the highest bicycle and pedestrian activity have also encouraged economical land use and compact, mixed-use development. Redevelopment projects are reclaiming urban land for dense, pedestrian-friendly neighborhoods. At the same time, such projects reduce pressure for the development of agricultural and forest lands at the edges of the metropolitan area.

[12] Todd Litman, *Profiles of Business Leadership on Smart Growth, New Partnerships Demonstrate the Economic Benefits of Reducing Sprawl*, Victoria Transport Policy Institute, 1999. www.vtpi.org
[13] Metropolitan Health Department, Division of Pollution Control, *Metropolitan Nashville & Davidson County, Tennessee, 1999 Annual Report.*
[14] American Lung Association, *State of the Air: 2001*.
[15] http://bicyclinginfo.org/pp/benefits/enviroben/index.htm
[16] World Watch Institute

This approach to land-use planning is also typically pro-active about preserving open space and habitat. In recent years, Metro Parks' greenways program has preserved about 4,000 acres of open space and ensured the protection of riparian areas on all of the major waterways in the county.

HEALTHIER NASHVILLIANS

For years, organizations such as the American Lung Association and the Centers for Disease Control and Prevention (CDC) have promoted the health benefits of regular physical activity. Just a few minutes of exercise a day can reduce the risk of coronary heart disease, high blood pressure, diabetes, colon cancer, and depression. However, Americans are more sedentary today than ever. Recent studies from the CDC have found that 73% of American adults are not as active as they need to be, while 36% of young people are not vigorously active on a regular basis.[17] The CDC reports in the *Journal of the American Medical Association* that the United States has the highest obesity rate of any industrialized nation. Tennessee's obesity rate of 22.7% (up from 12.1% in 1991) is among the highest in the nation.[18]

The CDC points to the automation of the workplace and home, and the fact that the automobile has replaced most trips that were undertaken on foot or bike in the past as reasons for American's inactivity. Indeed, public health officials nationwide are beginning to look at the role the design of our cities has played in making physical activity nearly obsolete. Rather than being integrated into daily activities, many find that physical activity now requires a scheduled and disciplined effort.

When bicycle and pedestrian facilities are integrated into a community's transportation system, walking and riding become available to everyone right outside the front door. In addition, these modes can replace some automobile trips, and incorporate physical activity into everyday travel activities. The difficulty in many of Nashville's neighborhoods is finding a safe place to walk or bicycle. Sidewalks do not exist in many of Nashville's neighborhoods, and bikeways are almost nonexistent. There are significant opportunities to make walking and bicycling more prevalent in Metro Nashville.

CONCLUSION

The range of benefits provided by a pedestrian and bicycle-friendly community is broad. These benefits are quantifiable, such as higher property values, lives saved, and lower public health costs. Many other benefits are less quantifiable but also important; like the ability to share a bicycle ride with one's grandchildren, a simple walk to the corner grocery, or the freedom from driving for every trip. Investing in a pedestrian and bicycle infrastructure achieves multiple objectives and helps ensure a high quality of life for all Nashvillians.

[17] Department of Health & Human Services and Centers for Disease Control and Prevention, *Behavioral Risk Factor Surveillance System – United States*, 1996 and 1998. www.cdc.gov/brfss/ti-surveydata2001.htm

[18] Centers for Disease Control, Journal of the American Medical Association

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B. HISTORY OF PEDESTRIAN & BICYCLE PLANNING IN NASHVILLE

Metro Nashville has made significant progress in the last several years when it comes to walking and bicycling. However, the city's history, with regards to these issues, extends back to only the recent past. Most of Nashville's sidewalks are on streets in the oldest parts of the city, which consist of neighborhoods built prior to the adoption of more suburban-style land development patterns that were prevalent after World War II. Similarly, with the exception of existing, signed bike routes on some state highways and the bike lanes that used to be present on Charlotte Pike, there were no on-street bicycle facilities in Nashville until 2000. Local bicycle planning efforts began in 1975 when a conceptual bikeway map for urbanized sections of Davidson County was included in a Planning Department memorandum. The now-gone Charlotte Pike bike lanes may have been installed as a result of this map.

"I actually have to drive somewhere else to walk just so I can feel safe."

Like many other American cities, Nashville's real shift toward pedestrian and bicycle planning began with Congressional approval of the federal Intermodal Surface Transportation and Efficiency Act (ISTEA) in 1991. Along with funding for conventional motor-vehicle related transportation projects, the act provided, for the first time, significant federal funds for walking, bicycling, transit, and other transportation projects directed toward achieving a multi-modal system and air quality goals. With funding available, communities throughout the country began to reexamine their transportation and land use priorities.

Many of Nashville's sidewalks are located in some of the older neighborhoods.

In the same year as the passage of ISTEA, the Metro Greenways Commission was established as a division of the Parks Department to guide development of trails throughout Davidson County. Early on, the commission adopted a Greenways Framework, which identified the seven major waterways in the county as greenway corridors. The framework offered the first comprehensive vision for how greenways could be integrated into the community. The commission's first major project, the Shelby Bottoms Greenway & Nature Park, opened in 1997 with about four miles of phase one trails. Today, there are over twenty miles of trail on the ground throughout the county and twenty-two more miles currently under development.

In 1992, *Mobility 2010: A Transportation Plan for Nashville and Davidson County* was adopted by the Metro Planning Commission. Though the plan did not specifically include any bicycle or pedestrian facilities, the text acknowledged the importance of walking and bicycling as transportation modes. The report states that use of "high occupancy vehicles including carpools, vanpools and public transit, and other alternatives such as bicycling and walking will provide a significantly greater amount of mobility needed in the future."

Developed by the Planning Department in 1996, the *Parks, Recreation, & Open Space Plan* provided more thorough planning guidance on bicycle and pedestrian facilities than any previous endeavor. The plan was adopted as part of *Concept 2010,* which was Metro's comprehensive plan. The *Parks, Recreation, & Open Space Plan*

also included the Greenways Commission's Greenways Framework, which resulted in integration of greenway considerations into all subarea plans and the development review process. In addition, the *Parks Plan* identified major street corridors on which the installation or enhancement of bicycle and pedestrian facilities was recommended. For one of the first times in a Metro planning document, the text enumerated a set of goals for the development of a multi-modal transportation system.

The JDN Greenway, located on the Cumberland River, was constructed as part of a commercial development project.

Also in 1996, a committee called the Traffic and Pedestrian Safety Task Force (TAPS) was established by the Metro Council. A final report of their findings and recommendations was completed in 1998 and highlights the numerous pedestrian and bicycle deficiencies within the community. Issues addressed by the report included planning needs, design considerations, motorist behavior, transit interface, and Metro policies and ordinances. Some specific watershed recommendations of the task force included the development of a pedestrian and bicycle master plan, creation of a Metro traffic calming program, and creation of a pedestrian and bicycle coordinator position in Metro government.[19]

By 1997, some citizen pedestrian and bicycle advocates involved with the Greenways Commission initiated two street-based projects. With support from the Parks Department, Metro Public Works pursued funding for a Pilot Bikeway Project (PBP) and a countywide pedestrian and bicycle plan. The goal of the PBP was to provide a network of short-distance on-street bicycle facilities in west Nashville neighborhoods, with a connection to downtown through Music Row. This area was selected because of the volume of existing bicycle traffic, and because of the density and mixed-use character of the area. The PBP is currently being implemented.

The Metro-wide pedestrian and bicycle plan has become the *Strategic Plan for Sidewalks & Bikeways*. Since the plan was proposed, the scope has expanded to include detailed guidance regarding compliance issues with the Americans with Disabilities Act (ADA), a thorough condition assessment of existing sidewalks, and other information that will facilitate immediate implementation.

Magnolia Boulevard was identified in the Pilot Bikeway Project as a good candidate for bike lanes.

Nashville's *Downtown Transportation Plan for 2000-2020* identified a study area inside the interstate loop that rings downtown Nashville. The goals identified in the plan address intermodal transportation, land use, freeways, congestion, and visual character. Improving pedestrian circulation was identified as one of the policies in the plan. Key recommendations include constructing pedestrian facilities, expanding the greenway network, and hiring a full-time Metro coordinator for pedestrian and bicycle facilities. Also, bicycle recommendations included integrating study area bicycle

[19] Metro Nashville, *Traffic and Pedestrian Safety Task Force Final Report*, August 1998.

improvements into a community-wide bicycle master plan, and installing bicycle racks and lockers throughout the downtown area.[20]

In fiscal year 2000-2001, Mayor Purcell proposed, and the Metro Council approved, $15 million for sidewalk construction. This is more than had been spent on pedestrian facilities in the five previous years combined. In fiscal year 2001-2002, the Mayor committed an additional $20 million to sidewalks. As Metro's new commitment to a pedestrian and bicycle infrastructure proceeds, this plan is intended to help guide where future sidewalks are built and how they are designed, constructed and maintained.

[20] Metro Nashville, *Downtown Transportation Plan*, August 2000.

CHAPTER TWO: THE PLANNING CONTEXT

C. RELATIONSHIP TO OTHER PLANS

INTRODUCTION

There have been many efforts during the past to make walking and bicycling more integral components of Nashville's transportation system. In 2001, Mayor Bill Purcell took a major step toward achieving a truly multi-modal transportation system by recognizing the need for the *Strategic Plan for Sidewalks & Bikeways*. The plan is not, however, a stand-alone document. The following is a brief description of other planning documents and processes that are relevant to the sidewalk and bikeway plan. Each was reviewed during the development of this plan to ensure that there are common goals and consistency between plans.

"Many businesses are located within walking distance of my home but it is difficult to reach them due to the lack of sidewalks and crossing signals."

PARKS & GREENWAYS MASTER PLAN

Adopted shortly before the completion of this plan, the *Parks and Greenways Master Plan* presents a one hundred year vision for parks and greenways development in Davidson County.[21] The plan refines the Greenways Framework that had been adopted as part of the 1996 parks plan. The earlier framework relied almost exclusively on the Cumberland River and its major tributaries as trail corridors. The new plan affirms the essential role of the waterway-based system, but expands the greenways vision with overland routes that will ensure that trails are also provided in those neighborhoods that are not located near waterways. In addition to providing convenient access to passive recreation, the expanded greenways framework will also facilitate use of the trails for transportation functions.

The Planning Department is beginning to use the concept of Community Transect Zones for a range of land-use and development planning efforts and decisions. There are seven different Community Transect Zones, each having differing levels of development intensity, mix of uses, and public services provided. These zones are described in Chapter Three. The *Parks & Greenways Master Plan* used the transect zones to guide greenway network recommendations. It also proposes that people in core, center and neighborhood transect zones, which are the densest transect zones, will never be more than two miles away from a greenway. The two-mile distance is based on the common planning principle that most bicyclists are willing to travel up to two miles for a transportation trip. The plan further recommends that street-based pedestrian and bicycle facilities be developed to provide access to the off-street trails. Figure 2.1 illustrates this concept.

The *Strategic Plan for Sidewalks & Bikeways* also places a priority on the development of street-based pedestrian and bicycle facilities in the higher density Transect Zones. The greenway network recommended in

The Strategic Plan for Sidewalks & Bike-ways is designed to complement other plans for Nashville, like the Parks and Greenways Master Plan.

[21] Nashville and Davidson County, *Metropolitan Parks and Greenways Master Plan*, 2002.

GREENWAY CONCEPT DIAGRAM

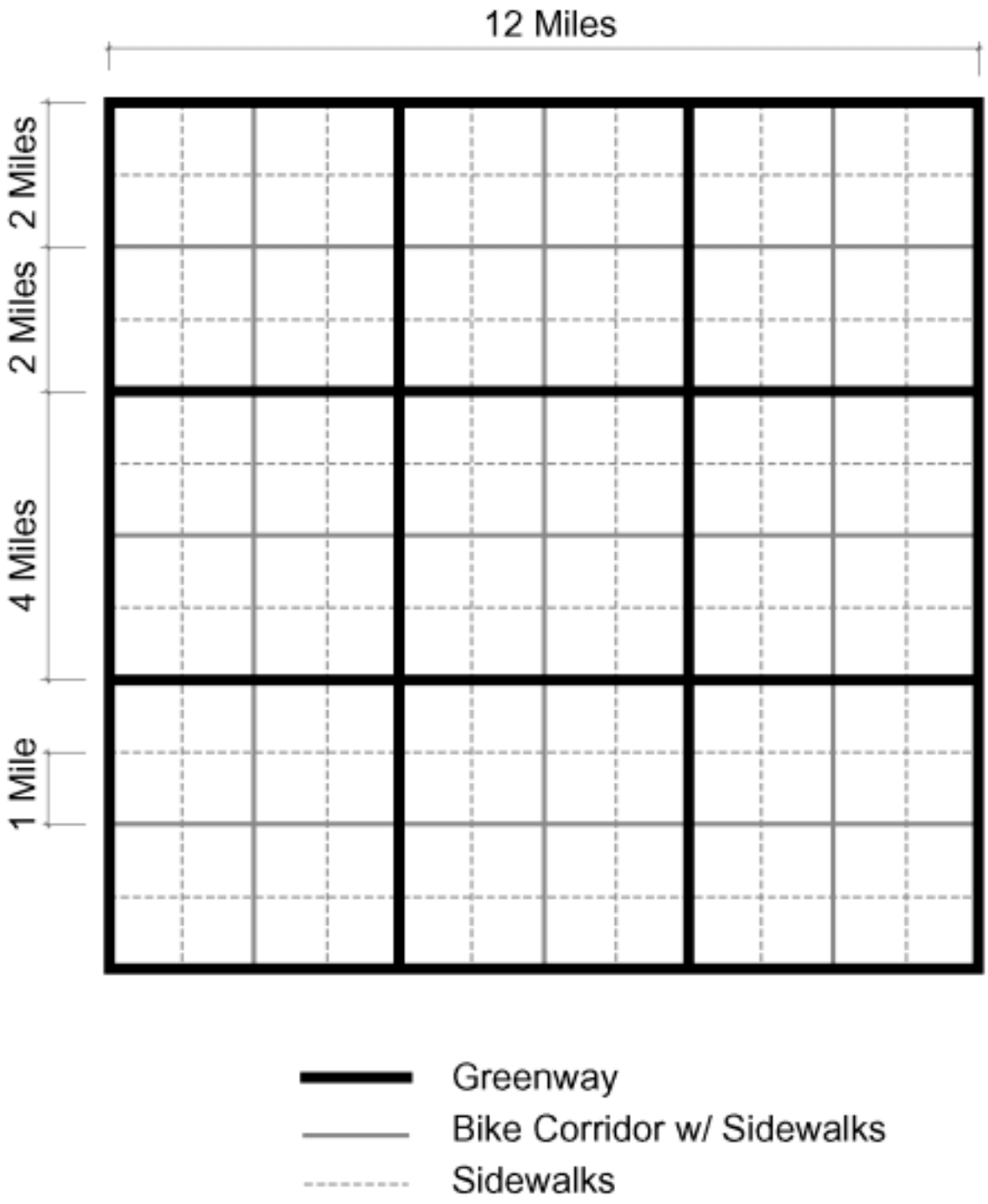

Figure 2.1: Relationship of Pedestrian & Bicycle Facilities to Greenways.

the *Parks & Greenways Master Plan* is intended to overlap with the project recommendations in the *Strategic Plan for Sidewalks & Bikeways* for a comprehensive on and off-street pedestrian and bicycle network. Chapter Three contains further discussions of the greenway system that is recommended in the *Parks & Greenways Master Plan*.

MAJOR THOROUGHFARE PLAN

Currently being developed, the *Major Thoroughfare Plan* will provide a detailed assessment of Nashville's existing and future roadway network. Its purpose is to provide a clear course of action for the development of the community's roadway system over the next twenty-five years. The scope of the plan indicates that pedestrian and bicycle facilities will be addressed as a strategy for reducing traffic congestion and improving the quality of life of Nashville. The team members for the *Strategic Plan for Sidewalks & Bikeways* have consulted on pedestrian and bicycle facilities that are to be incorporated into the new roadway cross-sections to be recommended as part of the *Major Thoroughfare Plan*. Future roadway improvements identified in the *Major Thoroughfare Plan* are important, cost-effective opportunities for bikeway improvements. In most cases, pedestrian and bicycle facilities can be incorporated into the funding and design of future roadway projects.

The 2025 Long Range Transportation Plan identifies the need for both intermodal and multimodal transportation in Nashville.

2025 LONG RANGE TRANSPORTATION PLAN

In 1999, the Nashville Area Metropolitan Planning Organization's (MPO) *2025 Long Range Transportation Plan* was released. An update of *Transportation 2015*, the primary purpose of the new plan is to provide a blueprint for satisfying existing and anticipated demands on the regional transportation system that serves the five-county Nashville metropolitan area. The five counties are Davidson, Rutherford, Williamson, Wilson, and Sumner.

The plan notes that, historically, bicycle and pedestrian facilities have not been given significant consideration in transportation system development throughout the region. It recognizes that new road projects and improvements to existing roads offer opportunities to integrate bicycle and pedestrian facilities. The plan also encourages local governments to develop land use policies and plans that acknowledge the relationship between land use and the transportation system. Toward this end, plan recommendations include reducing travel demand by clustering development and encouraging mixed-use development.

In addition, the *Long Range Transportation Plan* emphasizes that the regional transportation system needs to be both intermodal and multi-modal in order to maximize the efficiency of the transportation system. To accomplish this, it recommends that the region acknowledge and address the wide range of trip needs by the public and offer a practical choice of transportation alternatives to low occupancy vehicles, including walking and bicycling.

The *Long Range Transportation Plan* provides the vision for regional transportation facilities that accommodate all modes. The *Strategic Plan*

for Sidewalks & Bikeways will provide the tools to implement the non-motorized components of the transportation plan for Metro Nashville.

SUBAREA PLANS

The Metro Planning Department's subarea planning program was developed in 1988. This program geographically divides Davidson County into fourteen subareas, which are presented in Figure 2.2. Each subarea plan addresses demographics, land use policy, and general infrastructure issues. More recently, the subarea planning process has incorporated finer-grain plan components at a neighborhood scale. Because land use and transportation have significant impacts on each other, the subarea plans present an opportunity to ensure that both land use and transportation decisions are coordinated and work toward achievement of the same objectives.

Most of the existing subarea plans include pedestrian and bicycle-related recommendations, including greenways. The recommendations included in existing subarea plans served as some of the base data used in the development of the *Strategic Plan for Sidewalks & Bikeways*. Conversely, as each subarea plan is updated, the *Strategic Plan for Sidewalks & Bikeways* recommendations that apply to the subarea should be incorporated.

TRANSPORTATION IMPROVEMENTS PROGRAM

A new *Transportation Improvement Program* (TIP) is developed by the Nashville Area MPO every three years. The TIP compiles and prioritizes scheduled transportation projects within the region. All of the listed projects are funded, in part, with federal funds that are allocated as part of the 1996 Transportation Equity Act for the 21st Century (TEA-21). Pedestrian and bicycle-related projects qualify for funding through several TEA-21 funding categories. TIP criteria for project selection encourage projects that facilitate non-motorized transportation. TIP projects must comply with air quality conformity requirements. Because the TIP is the sole means of distributing TEA-21 regional transportation funding, every project identified in the *Strategic Plan for Sidewalks & Bikeways* for which federal funds are desired must be included in the TIP.

OTHER PLANNING EFFORTS

The *Strategic Plan for Sidewalks & Bikeways* is Metro's most detailed and comprehensive pedestrian and bicycle-related planning document to-date. Development of the plan itself is the fulfillment of recommendations found in other planning documents. Furthermore, the *Strategic Plan for Sidewalks & Bikeways* provides recommendations that should guide the implementation of the pedestrian and bicycle-related elements of other future plans. The future plans that address these types of facilities within Metro Nashville should refer to this plan in their implementation efforts.

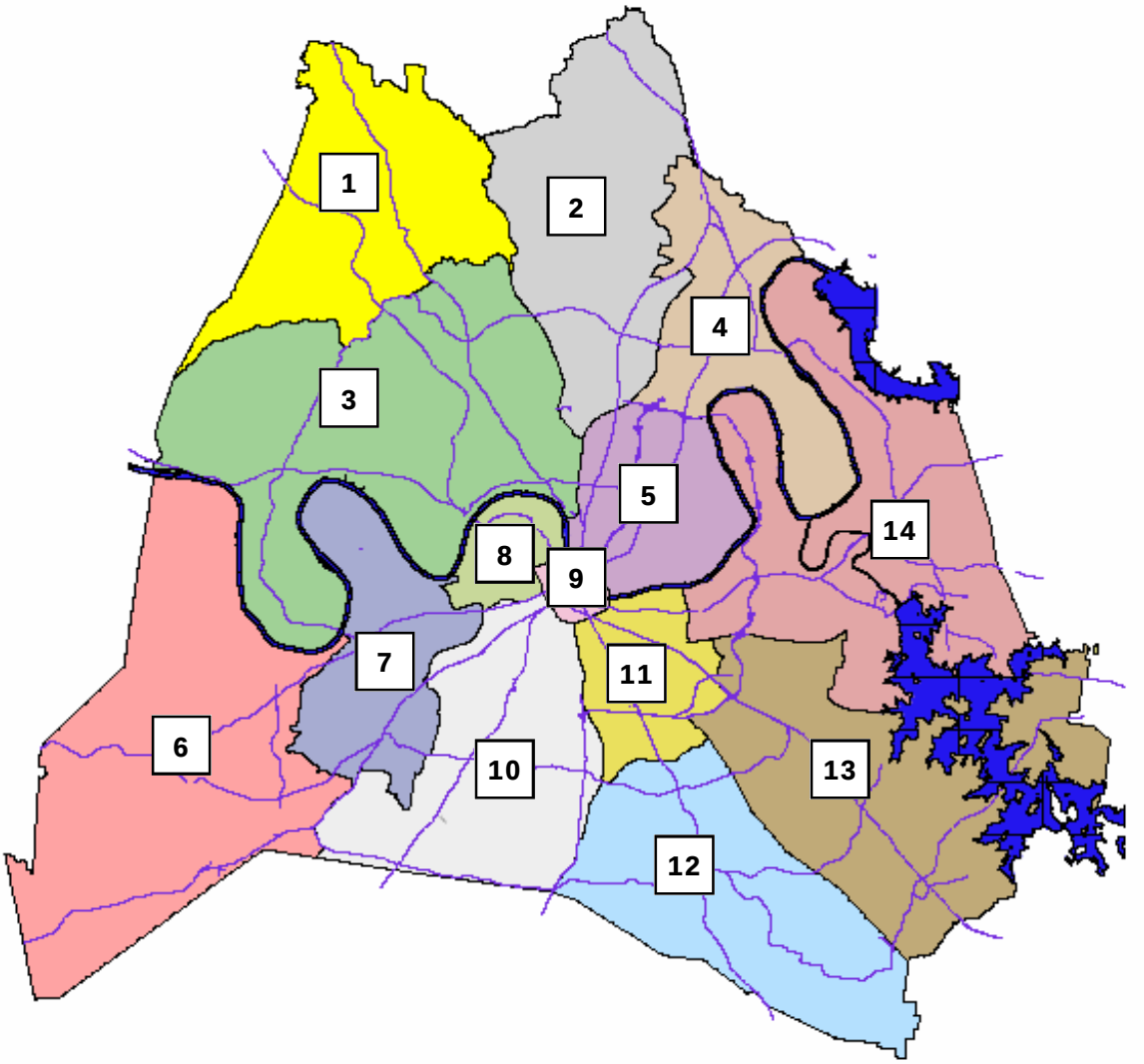

Figure 2.2: The Fourteen Subareas in Davidson County.